

parameter as determined in the original fuel survey.

(iii) If the new 50th percentile level for any fuel parameter is greater than or equal to the 60th percentile level reported in the initial certification, then the fuel-specific certification is no longer valid. In such instance, the certifier must immediately discontinue the sale and use of the subject detergent under the conditions of the fuel-specific certification and must immediately notify any downstream customers/recipients of the subject detergent that the certification is no longer valid and that their use of the detergent must discontinue within seven days. To avoid liability and penalties under §§ 80.169 and 80.172, the certifier must take these remedial steps within 45 days of the anniversary of the original fuel-specific certification. Downstream customers/recipients must discontinue usage of the detergent within seven days of receipt of notification of the detergent's invalidity to avoid such liability.

(4) The fuel composition survey results which support the original test fuel specifications and the annual statistical analyses, along with related documentation on test methods and statistical procedures, shall be retained by the certifier for a period of at least five years, and shall be made available to EPA upon request.

[61 FR 35369, July 5, 1996, as amended at 79 FR 23648, Apr. 28, 2014]

#### § 80.165 Certification test procedures and standards.

This section specifies the deposit control test requirements and performance standards which must be met in order to certify detergent additives for use in unleaded gasoline, pursuant to § 80.161(b)(1)(ii)(A)(3). These standards must be met in the context of the specific test procedures identified in paragraphs (a) and (b) of this section, except as provided in paragraph (c) of this section. The testing must be conducted and the performance standards met when the subject detergent additive is mixed in a test fuel meeting all relevant requirements of § 80.164, including the deposit-forming tendency demonstration specified in § 80.164(b)(3), if applicable. Complete test docu-

mentation must be submitted by the certifying party within 30 days of receipt of a written request from EPA for such records. The certification test procedures and standards associated with the alternative national generic certification option in § 80.163(a)(1)(iii) are contained in § 80.176.

(a) *Fuel injector deposit control testing.* The required test fuel must produce no more than 5% flow restriction in any one injector when tested in accordance with ASTM D5598. At the option of the certifier, fuel injector flow may be measured at intervals during the 10,000 mile test cycle described in ASTM D5598, in addition to the flow measurements required at the completion of the test cycle, but not more than every 1,000 miles.

(b) *Intake valve deposit control testing.* The required test fuel must produce the accumulation of less than 100 mg of intake valve deposits on average when tested in accordance with ASTM D5500.

(c) *Materials incorporated by reference.* The published materials identified in this section are incorporated by reference into this section with the approval of the Director of the Federal Register under 5 U.S.C. 552(a) and 1 CFR part 51. To enforce any edition other than that specified in this section, a document must be published in the FEDERAL REGISTER and the material must be available to the public. All approved materials are available for inspection at the Air and Radiation Docket and Information Center (Air Docket) in the EPA Docket Center (EPA/DC) at Rm. 3334, EPA West Bldg., 1301 Constitution Ave. NW., Washington, DC. The EPA/DC Public Reading Room hours of operation are 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number of the EPA/DC Public Reading Room is (202) 566-1744, and the telephone number for the Air Docket is (202) 566-1742. These approved materials are also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030 or go to [http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html). In addition, these

materials are available from the sources listed below.

(1) *ASTM International material*. The following standards are available from ASTM International, 100 Barr Harbor Dr., P.O. Box C700, West Conshohocken, PA 19428–2959, (877) 909–ASTM, or <http://www.astm.org>:

(i) ASTM D5500–98 (Reapproved 2008), Standard Test Method for Vehicle Evaluation of Unleaded Automotive Spark-Ignition Engine Fuel for Intake Valve Deposit Formation, approved July 1, 2008.

(ii) ASTM D5598–01 (Reapproved 2012), Standard Test Method for Evaluating Unleaded Automotive Spark-Ignition Engine Fuel for Electronic Port Fuel Injector Fouling, approved November 1, 2012.

(2) [Reserved]

[79 FR 23649, Apr. 28, 2014]

**§ 80.166 Carburetor deposit control performance test and test fuel guidelines.**

EPA will use the guidelines in this section to evaluate the adequacy of carburetor deposit control test data, used to support the minimum concentration recommended for detergents used in leaded gasoline pursuant to § 80.161(b)(1)(ii)(B).

(a) *Carburetor Deposit Control Test Procedure and Performance Standard Guidelines*. For demonstration of carburetor deposit control performance, any generally accepted vehicle, engine, or bench test procedure and associated performance standard for carburetor deposit control will be considered adequate. Port and throttle body fuel injector deposit control test data will also be considered to be adequate demonstration of an additive's ability to control carburetor deposits. Examples of acceptable test procedures for demonstration of carburetor deposit control, in addition to the fuel injector test procedure listed in § 80.165(a), are contained in the following references:

(1) “Test Method for Evaluating Port Fuel Injector (PFI) Deposits in Vehicle Engines”, March 1, 1991, Section 2257, Title 13, California Code of Regulations.

(2) “A Vehicle Test Technique for Studying Port Fuel Injector Deposits—A Coordinating Research Council Pro-

gram”, Robert Tupa et al., SAE Technical paper No. 890213, 1989.

(3) “The Effects of Fuel Composition and Additives on Multiport Fuel Injector Deposits”, Jack Benson et al., SAE Technical Paper Series No. 861533, 1986.

(4) “Injector Deposits—The Tip of Intake System Deposit Problems”, Brian Taneguchi, et al., SAE Technical Paper Series No. 861534, 1986.

(5) “Fuel Injector, Intake Valve, and Carburetor Detergency Performance of Gasoline Additives”, C.H. Jewitt et al., SAE Technical Paper No. 872114, 1987.

(6) “Carburetor Cleanliness Test Procedure, State-of-the-Art Summary, Report: 1973–1981”, Coordinating Research Council, CRC Report No. 529, Coordinating Research Council Inc. (CRC), 219 perimeter Center Parking, Atlanta, Georgia, 30346.

(b) *Carburetor Deposit Control Test Fuel Guidelines*. (1) The gasoline used in the tests described in paragraph (a) of this section must contain the detergent-active components of the subject detergent additive package in an amount which corresponds to the minimum recommended concentration recorded in the respective detergent registration, or less than this amount.

(2) The test fuel must not contain any detergent-active components other than those recorded in the subject detergent certification.

(3) The composition of the test fuel used in carburetor deposit control testing, conducted to support the claimed effectiveness of detergents used in leaded gasoline, should be reasonably typical of in-use gasoline in its tendency to form carburetor deposits (or more severe than typical in-use fuels) as defined by the olefin and sulfur content. A test fuel conforming to these compositional guidelines may be sampled directly from finished gasolines or may be blended to specification using typical refinery blend stocks. Test data using leaded fuels is preferred for this purpose, but data collected using unleaded fuels may also be acceptable provided that some correlation with additive performance in leaded fuels is available.

[61 FR 35372, July 5, 1996]